

same result. On December 5 M. Cornu succeeded in making several measures, though still much interrupted by clouds; the *Bulletin* states:—"Il a constaté la présence des trois lignes de l'hydrogène, C, F et  $\lambda = 434$  (échelle des longueurs d'onde); la raie D, du sodium, la raie b du magnésium et deux autres  $\lambda = 535$  et  $\lambda = 503$ . La première paraît coïncider avec la raie 1474 (échelle de Kirchhoff) ou  $\lambda = 532$  observée pendant les éclipses dans la couronne solaire; ce qui ferait peut-être penser que la raie notée comme correspondant au sodium pourrait être celle de l'élément solaire appelé hélium."

There is a slight confusion about the declination of this star, which, according to the lithographed *Bulletin*, M. Paul Henry made three minutes less than Prof. Schmidt, while the declination, as reduced by the latter to 1855°0, differs more than a minute from his declination for 1876°0, correctly carried back.

The nearest catalogue star is one 9.2 m. = + 42°, No. 4, 184, in the sixth volume of the Bonn Observations,  $\Delta\alpha = -24'6s.$ ,  $\Delta\delta = +4'3''$ , according to Prof. Schmidt's place. We find no star in the position of the new one, in the *Durchmusterung*, nor in Lalande, d'Agelet, Bode, Bessel, &c., nor Harding's Atlas.

The remarkable star of 1866 (T Coronæ Borealis) descended to the limit of unaided vision in ten days from its discovery by Mr. J. Birmingham, of Millbrook, Tuam, on the night of May 12, when it appears to have become suddenly visible as a star of the second magnitude: it is now a little over the eleventh magnitude in Bessel's scale extended.

The similar object of 1848, detected by Mr. Hind on the morning of April 28, then of the sixth magnitude, and certainly less than the ninth on April 4 and 5, attained its maximum about May 7, and at that time was a little brighter than 20 Ophiuchi, rated a fifth magnitude by Argelander. The maximum brilliancy assigned to this star in Schönfeld's last catalogue is one magnitude too low. It continued visible without the telescope to the end of May. Last summer it was not over the thirteenth magnitude.

[By observations at Mr. Bishop's observatory, Twickenham, on the 12th inst., the position of the new star for 1876°0 is in R.A. 21h. 36m. 50.35s. N.P.D.  $47^{\circ}43'4''$ ; Prof. Schmidt's declination is in error. The star was of the seventh magnitude and colourless; the sky, however, very indifferent.]

THE OPPOSITION OF MARS, 1877.—In addition to the stars observed by Bessel, which are mapped on the Astronomer-Royal's Chart in the *Monthly Notices* of the Royal Astronomical Society, the following lie near the path of the planet at this opposition:—

1. An uncatalogued star of the ninth magnitude, the place of which for 1877°0 is in R.A. 23h. 19m. 55.3s., N.P.D.  $101^{\circ}21'49''$ ; the planet in conjunction with this star, August 25°292, G.M.T.  $5^{\text{h}}14^{\text{m}}$  north.

2. Lalande, 45504 —  $7\frac{1}{2}$  mag.; mean place, 1877°0, in R.A. 23h. 8m. 56.1s., N.P.D.  $102^{\circ}14'0''$ ; the planet in conjunction with this star, September 5°224,  $3^{\text{h}}10^{\text{m}}$  north.

On September 6°415 Mars will be in conjunction with, and  $2'15''$  north of the tenth magnitude, the mean place of which is in R.A. 23h. 7m. 46.4s., N.P.D.  $102^{\circ}18'6''$ .

There is every reason to expect that this favourable opposition of Mars will be very completely observed with the view to another determination of the solar parallax.

### NOTES

FOR the erection of a monument to Linnæus 36,000 crowns have been received. The monument will be erected in Stockholm, and will be unveiled on January 10, 1878, the hundredth anniversary of the death of the great naturalist.

THE inauguration of the Liebig monument in the new promenade at Darmstadt, will shortly take place. Pupils, friends,

and admirers of Liebig are invited to be present on the occasion.

M. DE LESSEPS presented to the Academy of Sciences at its last sitting, the final report of Capt. Roudaire, who has returned from Tunis after having completed his survey of the Algero-Tunisian depression. The project is now quite complete and ready for execution. All the trigonometrical measurements have been taken, and the preliminary steps for making an inland sea have been considered. A commission, of which M. de Lesseps is a member, and will most probably be the referee, was appointed by the President, Admiral Paris. The opposition offered by some influential members of the Academy is now considered as being quite at an end.

FROM the *Tour du Monde* we learn that an American company proposes to introduce fur seals from Alaska into Lake Superior. The temperature of the lake is considered to be sufficiently cold for the purpose, and the company hopes to obtain from Congress and the Canadian Parliament an Act protecting the creatures from slaughter for twenty years, after which time it is supposed that they will be sufficiently acclimatised and numerous to form subjects of sport.

NEWS has been received from Gen. Nansauty, the adventurous observer who has located himself near the top of the Pic du Midi for the purpose of taking meteorological observations during the winter. He and his companions have been made comfortable and secure, the only thing wanting being a telegraph to connect the Pic du Midi with Toulouse as Puy-de-Dôme has been with Clermont. This will very likely be the work of next year. Up to the end of last week the weather was very mild and almost no snow had been observed.

AT the Arctic meeting of the Geographical Society on Tuesday night, honoured by the presence of the Prince of Wales, Sir George Nares and the other officers of the Expedition met with a deservedly enthusiastic reception. Addresses were given by Sir George Nares and Captains Stephenson and Markham, in which details were given of the work of the Expedition. Sir G. Nares gave a clear account of the currents of the Atlantic and Pacific in their bearing on the condition of the ice in the Arctic regions. We may now consider the Polar basin, he stated, as a locked-up bay continuing out of the narrowed North Atlantic Channel, with a warm stream of water constantly pouring into it between Spitzbergen and Norway, and a cold icy one as constantly running out between Spitzbergen and Greenland, and also through the very narrow straits between Greenland and America; the first conveying an enormous source of heat towards the north, the latter causing the intense cold of Canada and that on the east coast of Greenland and North America. In the Polar Sea, near the inflow of the warm water, we should naturally expect to meet the lightest ice and an early season; near the outlets the heaviest ice. And such is found to be the case. Heavy ice has been traced all the way from Behring Straits eastward to Bank's Land, and from there, west of Prince Patrick Island, to Ireland's Eye, from which point it is lost; for the sledging parties under Admirals Richards and Osborn, journeying along the north shores of the Parry Islands, found light ice. It is therefore concluded with certainty that some protecting land exists to the northward. From the *Alert's* winter quarters the heavy Polar ice was traced by Aldrich for one-third of the distance towards Ireland's Eye, leaving 400 miles still unknown; to the eastward, Beaumont proved that it extends for 100 miles, leaving about 500 miles still unexplored between his farthest and the farthest of the Greenland Arctic Expedition under Koldewey. We have now a distinct knowledge of the nature of the ice in the Polar Sea. Whether that sea extends to the Pole or across the Pole, we cannot, according to Sir George Nares, be absolutely certain, but by reasoning, we may safely predict that a very

broad opening exists north of Cape Columbia, and Sir G. Nares firmly believes that it extends at least as far as the Pole. During winter there appears to be a compact mass of ice in the Polar basin, the thinner portions of which are melted by summer heat, leaving open lanes or pools of water, giving sufficient scope for the broken-up permanent ice-mass to drive backwards and forwards according to the wind or current, its main course being towards the channels of outlet, by which a small portion escapes. By the end of September the increasing frost cements together the struggling masses, and young ice forms on the open spaces to about seven feet thick. Thus the pack covering the Polar Sea is a collection of separate pieces of ice, movable among each other during the summer like the pebbles and boulders in a river bed, each piece grinding against its neighbour as the whole body jostles its way along, slowly pressing forwards towards the outlet between Spitzbergen and Greenland. Sir George Nares showed that by calculation an extremely small proportion of the Polar ice can escape by the various channels, and that much of what remains may easily be at least 100 years old. Many other valuable observations were made on Polar questions by Sir George, and Captains Stephenson and Markham read interesting papers on "Arctic Winter Experiences" and "Sledge Travelling."

DR. PETERMANN has sent us a long letter on the English Arctic Expedition, which he has addressed to the President of the Geographical Society. Dr. Petermann says he has made himself acquainted with the history of every Arctic and Antarctic expedition that has ever been undertaken, and it appears to him "there never was a more able and heroic expedition than that of Capt. Nares. Capt. Nares's expedition may be said to have 'finished,' as it were, a great portion, say one-third, of the Arctic regions. . . . From Smith Sound to Behring Strait, the region of the Palæocrystic Sea, our knowledge is entirely due to British enterprise and perseverance." Petermann thinks Sir George Nares has exploded the fallacy of the continuous navigability of the Smith Sound route, and that it required the greatest moral courage to return with results diametrically opposed to what was expected. He thinks that had he been able to stay another winter and gone round to East Greenland, he would also have "finished" the Pole. Petermann thinks it has been a triumph of seamanship that the commander has been able to bring back the two ships safe and sound, and that if our "enlightened and liberal Government remains true to the English way of doing things, in a complete way, and not by half-measures, it is to be hoped that these vessels will once more be sent out by a more promising route." He then refers to the six routes to the pole, advocating the Novaya Zemlya and the East Greenland routes. He believes there is a great open sea all along Northern Siberia, and states that Prof. Nordenskjöld intends in 1878 to sail right across from Norway to Behring Strait. Petermann believes that a high latitude could easily be obtained along the west coast of Franz-Josef Land, and maintains that no proper attempt has been made since Parry's journey in 1827 to push north beyond Spitzbergen. But of all the routes that by East Greenland is the one which he advocates most strongly. He maintains that throughout the summer the East Greenland coast is almost free of ice, and even in winter there is a strong outward drift. He firmly believes that an expedition, like that which has just returned, would have no difficulty in sailing direct north, crossing the pole, and coming out at Behring Strait. These views are based on the observations of the whaling captain, David Gray, and on the known drift of the Polar currents. The well-established current by the Smith Sound route brings down much ice, but much more of the Palæocrystic ice must escape by the wide opening between East Greenland and Spitzbergen. The ice-drift must leave an open space behind, and there is therefore good reason to believe that in the Polar

region will be found an open sea. Petermann is convinced that Sir G. Nares, with the *Alert* and *Discovery*, could steam right to the pole by this route, probably in one season. He thinks it possible, moreover, that East Greenland and Franz-Josef Land may approach each other towards the pole, and still maintains the prolongation of Greenland across to Behring Strait, in, however, it appears to us, a somewhat modified and less objectionable form. He considers the central region to be divided into two nearly equal areas of land or islands, the one extending from the shore of East Greenland in about 20° W. long. over Baffin's Bay, Parry Island, and Point Burrow, Behring Strait, and Cape Yakan, in about 176° E. long.; the other half thence all along the Siberian Coast, over Franz-Josef Land, Spitzbergen, to East Greenland. These two regions are in all respects distinct. In the two former, or western, the land prevails, in the latter, sea. "It is not at all unlikely," Petermann states, "that Eskimos will yet be found right under the North Pole." A Swedish and a Dutch expedition have, he assures us, been decided on. He has no hope of anything being done, meantime, to carry out Weyprecht's scheme. The mass of data collected by various expeditions has not yet been half worked out. He still maintains: "It might be done, and England ought to do it." We have endeavoured to give the drift of Dr. Petermann's letter, without comment.

DR. PETERMANN has sent us Nos. 123-5, of his valuable series of papers, "Geographie und Erforschung der Polar Regionen." In these he discusses the results of Nordenskjöld's recent expedition, of the Siberian expedition of Finsch, Brehm, and Ziel, and those of the English expedition. As prefatory to an abstract of Nares's report, he describes and discusses some of the observations of previous expeditions, all tending to show the impracticability of the Smith Sound route, and the probability of an open Polar Sea. The papers are accompanied by three maps illustrating the observations and theories referred to, and whatever may be thought of the latter, are a valuable contribution to the polar question.

M. W. DE FONVIELLE writes to us protesting against any scheme of Arctic exploration by means of balloons in the present state of the aeronautical art. No such scheme is practicable without some certain means of directing a balloon and insuring its progress in any direction independently of air-currents; and as no method of steering and propulsion has yet been invented that merits consideration, discussion of the subject on existing bases is totally unscientific.

THE German Arctic Exploration Society has received a telegram from the Ob Expedition dated Jenisseisk, the 5th instant, announcing that Captain Wiggins has found a good harbour in the Podarala Bay, where he remained several weeks; he also discovered a large island north of the mouth of the Ob, and a new land route to the Jenissei. He found the water way up the Jenissei to Nurjaha good.

ABOUT two years ago the Registrar-General discontinued the practice of sending, free of charge, to the London Medical Officers of Health, copies of the returns of deaths made by the local registrars. Among the three vestries that still protest against this change for what is public property, is that of St. George's, Hanover Square. For the last two years, therefore, the Medical Officer of Health for St. George's, Dr. Corfield, has been without the returns for his district, and the result is shown in his fourth annual report, just issued. It appears that during the year, according to the Registrar-General's returns, out of ninety-three deaths from scarlet fever, diphtheria and fever, only six were reported to the sanitary inspector. "We had no knowledge," Dr. Corfield states, "of where the other eighty-seven deaths occurred, or what precautions were taken to prevent



the spread of the diseases by means of infected bedding, clothing, &c. This shows, I think, quite clearly, that it is necessary that in some way or another I should be supplied with the mortality returns, and especially with details of the deaths from infectious diseases. As regards the cases which do not prove fatal, there is at present no official way of obtaining information about them." Dr. Corfield has stated so clearly the ill effects of the present arrangement as to show that there is evidently urgent need for an alteration.

AT the Hamburg meeting of the German Naturalists, Prof. Virchow gave an address on the present position of anthropology. In introducing his subject he pointed out that anthropology, although one of the youngest of the sciences, already occupies as advanced a position as many of the older branches of study; and also that the races possessed of least ability are also those lowest in the scale of culture. To judge of the capacity for culture from the signs of it which exist is only admissible in the case of people who are surrounded by great intellectual activity, but not in the case of entirely isolated people. Thus the Australian Papuas by no means stand so low as has hitherto been believed. On this fact Virchow founds an important doctrine, which opposes the idea that such people must necessarily fade away when they come into contact with civilisation. Virchow thinks that the extinction of such races is rather to be ascribed to the barbarousness of Europeans and to the incapacity of the latter to educate the former. There is yet no evidence that uncivilised races must become extinct, which indeed is contradicted by the history of Europeans themselves. If the civilised people of the present day be considered as the product of a higher development, we cannot regard the possibility of such a development as a cause of the extinction of such people as are now on the same platform of culture which we ourselves once occupied. In relation to this Virchow spoke of the value of a systematic observation, of collections of skulls, weapons, clothing, also of evidences of intellectual activity, religious ideas, language, &c., and urged the important services that might be rendered in this respect by captains both in the navy and in the merchant service. No time is to be lost; every day is of value, since many of the lower races are rapidly becoming extinct. Virchow showed the utility of such observations by reference to the German peoples, of whose anthropology we as yet know almost nothing. Osteological remains, to be of any scientific value, should be seen in the place where they are found. Virchow spoke of the value of the statistics recently taken as to the colour of the hair, eyes, and skin of German children, to which we have already referred.

THE Siberian explorers, Brehm and Finsch, have arrived at St. Petersburg, after a most successful journey.

THE following extracts of a letter from Dr. Miklucho Maclay, dated July 3, Maclay Coast (New Guinea), appear in the *Golos*, November 28:—"I landed on June 28; the natives received me in a very friendly way, and were not at all astonished to see me amongst them again; they said they had been long awaiting my arrival, as I had said when leaving them I would soon return. Since the departure of the *Isumrud* in December, 1872, no ship had visited the shore. Three or four months after that time there was an earthquake on the island, which destroyed many villages in the highlands. Talking with my old acquaintances, I was astonished to hear how many Russian words they had retained since my first stay; they pronounce the words perfectly, and have introduced them in common use. Hundreds of natives from the neighbouring settlements helped in building me a house. I have brought for the Papuas various seeds of useful plants and of fruit-trees, and I hope they will grow as well as the Indian corn I left here in 1872. I expect soon to make some excursions in the highlands." The captain of the *Sea Bird*, who transmitted this letter, adds

that Dr. Maclay was perfectly well on board the ship during the cruise and on his landing.

THE Omsk correspondent of the Irkutsk newspaper *Siberia*, writes under date September 27, that M. Potanin's expedition in Mongolia (*NATURE*, vol. xiv., p. 534) has been stopped by the Chinese authorities at Toolty, a short way beyond the Chinese frontier. Arriving at Toolty, the members of the expedition expressed their wish to make a visit to the Governor of the place. Being told that he resided in a convent some miles from the town, they proceeded thither, but on their arrival they were informed that the Governor was not at home, and that the visit must be made next morning. On going next morning to the convent they were met at the doors by a hostile crowd, which soon began to throw stones at them, seriously injuring two persons. The authorities then appeared and took the members of the expedition into custody, but released them next day, announcing that they could not answer for their safety if they insisted on proceeding further.

SOME very important geological discoveries have been made by Prof. Hartt and his assistants in Brazil. Working over again the region explored by Prof. Theodore B. Comstock in 1870, and by Messrs. Hartt and Derby in 1871, they have extended the Devonian down 1,000 feet below the beds discovered by Messrs. Smith and Comstock. The lower beds are Oriskany, with the characteristic North American fossils, as well as some others (seventy-five species in all) which have undoubted Devonian affinities. Carboniferous beds were also discovered to the northward, making a complete section from the base of the Devonian to recent beds in the lower Amazonian Valley.

PROF. TYNDALL has accepted the office of President of the Midland Institute for 1877.

THE professors of the new School of Anthropology established in Paris under the patronage of the Faculty of Medicine and the Municipal Council, intend to organise excursions. The first of these was made last Sunday to the St. Germain Museum of National Antiquities, of which M. Mortillet is the sub-director. He explained to a large number of visitors the arrangement of the collections and the scientific value attached to the several curiosities which are exhibited.

M. LEVERRIER has organised meteorological warnings for St. Cloud, Clichy, Boulogne, and Levallois Perret, and will gradually extend them to the suburban districts. He will give a lecture at Boulogne to the several delegates of Communes for the purpose of teaching them the use of the meteorological maps published daily by the Observatory.

ON the 16th of next month, at the scientific meeting of the Zoological Society, we are informed that Captain Feilden, Naturalist to the Arctic Expedition, will exhibit the birds obtained by him in the regions he has so recently traversed.

AT the last meeting of the French Geographical Society, it was intimated that M. Jules Trebeau had been sent to explore French Guiana, which although a part of the territory of a civilised nation is almost untroubled by explorers. M. Trebeau will proceed by the river Maroni, up to its source, with a party of three French and ten negroes, and will return by the Oyapok or Amazon, according to circumstances.

"NIPPON and its Antiquities" is the title of a pamphlet by Mr. W. C. Borlase, in which from personal investigation during a stay of some weeks in Japan, and the study of the best works on the subject, the author gives an interesting summary of what is known of the ethnology, mythology, and religions of the Japanese. The pamphlet is published by Brendon and Son, Plymouth.

IN a paper in the *Cleveland* (U.S.) *Herald*, November 14, entitled "Archæological Frauds," Col. Whittlesey examines some of the recent so-called prehistoric finds in some parts of the United States, and comes to the conclusion that most of them are extremely suspicious; among these is the well-known Grave Creek inscription.

THE New York Aquarium, some account of which we gave recently, is publishing a fortnightly journal. Of course it is essentially popular, but, while keeping an eye to the success of the aquarium, it gives considerable information concerning its inhabitants.

WE have received from New South Wales several papers which show that there is a creditable amount of activity in connection with science in that colony. We recently published a brief account of two meetings of the Royal Society of the colony, and from the rules, list of members, and other documents in connection with that body, which have been sent us, we have hopes that it will become an important centre of scientific influence and culture. We believe that the recent development of the Society is greatly due to the energy of the hon. secretary, Prof. Liversidge. "New South Wales; its Progress and Resources," is the title of a paper prepared by the authority of the Commissioners for the Philadelphia Exhibition, and giving, in brief space, an interesting account of the rapid progress of the colony. Along with this is a mineral map of New South Wales, showing the localities of the principal minerals, the back being utilised for the tabulation of some important statistics. As text to this map is a long and valuable paper by Prof. Liversidge giving a complete account of the minerals of the colony. Finally, we have by the same gentleman, a "Report of the Sugar-Cane Disease in the May River District, Queensland."

WE noticed some time ago the opening of Mr. Rooke Pennington's local museum at Castleton, in Derbyshire. We are informed that the result has been a great impetus to scientific study in that and the neighbouring Peak villages, and that a course of lectures has been arranged in connection with the museum. The first lecture will be delivered by Mr. Ralph Betley, F.G.S., who will take as a subject "Water." Mr. C. E. De Rance will give the second.

A VERY valuable and interesting collection of silver ores from Chili and Bolivia was sold by auction the other day by Mr. Stevens at his sale rooms in King Street, Covent Garden. Some of the specimens realised very high prices, one piece of red silver about the size of an orange being bought by Mr. H. Ludlam for 200*l.*, another about a quarter the size, with very perfect crystals, was secured by Mr. Bryce M. Wright, the mineralogist, for 100 guineas, and the remainder, comprising about 100 small specimens, were sold at proportionate prices; we believe Mr. Wright bought nearly a third of the collection, which was probably one of the finest ever brought to England.

THIS year Dr. Hermann Müller was accompanied to the Alps by one of his pupils, Ed. Gaffron, who collected, prepared, and carefully mounted fine specimens of all those Alpine flowers which Dr. Müller has observed and described, or will describe, in *NATURE*, in his articles on the Fertilisation of Flowers by Insects. Twenty complete collections have been made, and the young collector is anxious to sell them in order to raise funds to accompany Dr. Müller next summer. No doubt a number of our readers will desire to possess such a collection, which may be obtained by writing to Eduard Gaffron, Realschule, Lippstadt. The price, we believe, of a single collection is fifteen shillings.

THE additions to the Zoological Society's Gardens during the past week include a Patas Monkey (*Cercopithecus ruber*) from West Africa, presented by Mr. J. W. Feather; an Australian

Crane (*Grus australasiana*) from Australia, presented by Mr. H. Roberts; two Crested Guinea Fowls (*Numida cristata*) from West Africa, presented by Mr. Daniel R. Ratcliff; two King Parrakeets (*Aprosmictus scapulatus*) from New South Wales, presented by Miss E. Rigby; a Short-eared Owl (*Otus brachyotus*), European, presented by Mr. W. R. Stanley; a Snowy Owl (*Nyctea nivea*), European, presented by Mr. John Kendall; a Brown Capuchin (*Cebus fatuellus*) from South-east Brazil; a Kinkajou (*Cercoleptes caudivolvulus*) from South America, a Royal Python (*Python regius*), a West African Python (*Python sebae*) from West Africa, deposited.

## SOCIETIES AND ACADEMIES

### LONDON

Linnean Society, December 7.—Mr. G. Bentham, vice-president, in the chair.—Mr. Francis Day read Part I. of the "Geographical Distribution of the Fresh-water Fishes of India." This contribution aims towards solving the vexed question of whether the fauna of Hindostan is mostly African or Malayan. The author first separates the true fresh-water species from those which enter rivers from the sea for breeding or predacious purposes. Out of nine families of Spiny-rayed fish (Acanthopterygians), only two are likewise found in the African region, but one of these is in Madagascar, which is doubtfully African; the other is also found in the Malay Archipelago, which possesses representatives of eight out of nine families. Each of the forty-five known species is then followed out, and the author considers that the Indian and Malayan fauna (of the group in question) are essentially identical, whereas the species are scarcely represented in Africa. The fresh-water fishes of Ceylon, the Andamans and Nicobars, he believes, are also strictly Indian, whilst as these fishes cannot be spread except by line of fresh-water communication, it thus appears highly probable that these islands were at one period connected to the continent of India. Moreover, certain forms exist in Malabar which are absent from the rest of India, but reappear in the regions of Chittagong or Siam.—Mr. J. G. Baker gave the substance of an exhaustive memoir on a general systematic arrangement of the Iridaceæ (the Iris family). Nearly all the Iridaceæ inhabit temperate regions, and may be grown successfully in the open air in this country. Some are among our most familiar garden genera—for instance, the Crocus, the Iris, and the Gladiolus. Altogether about 700 species and sixty-five genera are now recognised. In his present classification the structure of the perianth mainly guides the author to adopt three primary divisions—(1) Ixiææ, (2) Iridææ, and (3) Gladiolææ, the above common garden plants serving respectively as typical examples of these groups. The three divisions in question are again subdivided into—(a) Those having bulbs with free stamens; (b) Those having bulbs with monadelphous stamens; (c) Those wanting bulbs, but with free stamens; (d) Those also devoid of bulbs with monadelphous stamens. As regards distribution, 312 genera are found at the Cape; in Europe and North Africa, 94; Temperate Asia, 89; Tropical America, 82; Tropical Africa, 56; South America, 34; Australia, 31; and Polynesia, 1.—The Rev. W. A. Leighton communicated a description of eleven new British Lichens, seven of these belonging to the genus *Lecidea*, one to *Odontotrema*, and three to *Verrucaria*.—The Chairman passed some remarks on a folio treatise concerning the structure and culture of the quinine-bearing trees (*Cinchona*) in our East Indian Plantations, by I. E. Howard, F.R.S.—Mr. T. Christy exhibited specimens of the so-called Black Coral (*Antipathes*) from the Philippines, referring to its commercial value.—Thirteen gentlemen were elected Fellows of the Society.

Zoological Society, December 5.—Dr. E. Hamilton, vice-president, in the chair.—A letter was read from Count T. Salvadori, announcing that a new species of Paradise-bird, of the genus *Drepanornis*, had been discovered near the most inland point of Geelvink Bay, New Guinea.—A communication was read from Mr. Andrew Anderson, containing some corrections of and additions to previous papers on the Raptorial Birds of North Western India.—Mr. Francis Day read a paper on the fishes collected by the Yarkand Mission, in 1873, to which the late Dr. Stoliczka was attached as naturalist. The paper gave an outline sketch of the fresh-water fishes of Hindustan, Afghanistan, Western Turkestan, Yarkand, Tibet, and Cashmere. The author showed that the principal fishes of Yarkand belong to a